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AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER HOFFLER, RAHEEM	
			ART UNIT 2165	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/824,961	<b>Applicant(s)</b> MINIUM ET AL.	
	<b>Examiner</b> RAHEEM HOFFLER	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-16,19-28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-16,19-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **Detailed Action**

### ***Response to Amendment***

The Office Action has been filed in response to amendment filed 2 July 2008. Rejections to Claims 11-15 under 35 USC 112 have been withdrawn. Rejection to Claims 1 & 3-15 under 35 USC 101 has been maintained. Applicant's arguments with respect to the rejection under 35 U.S.C. § 102 and 103 have been considered but are moot in view of the new ground(s) of rejection. Accordingly, this action has been made Final.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 & 3-15 of the claimed invention is directed to non-statutory subject matter. Claim 1 and 11 make claim to a plurality of software components and a classification component, but fail to include any type of hardware. Therefore, Claims 1& 3-15 comprise software per se.

#### **Software, per se:**

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Art Unit: 2165

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, 6, 16, 20, & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meik et al (USPG Pub No. 20050108200A1; Meik hereinafter) in view of Do et al (USPG-Pub No. 20020170042A1; Do hereinafter).

As for Claim1, Meik et al teaches of a distributed classification system comprising a plurality of software components shared by unrelated software design tools, stored in a

Art Unit: 2165

computer readable storage medium and executable by a processing device (see Fig. 1; e.g., object types; (see paragraph [0155-0160], [0167-0185]; e.g., filtering module; design tools can be broadly interpreted to be any type of tools or modules or components that interact with the classification system and manipulate objects and information into a desired shape or format)) and a classification component that couples the software components to a common classification structure based on a structure type comprising structure type class, node types and structural constraints (see paragraph [0008-0014], [0037], [0122-0129]; e.g., search engine component that performs all of the duties of classification and categorization. As stated, “herein, all steps are executed for a contents-related classification and categorization of the documents, and the results of this categorization (the so-called “extracts”) are permanently stored in a database”. Also stated, “Nevertheless, the modular architecture of the novel search engine according to the preferred embodiment of the underlying invention is specially equipped for being employed in this field of application. As can be taken from FIG. 12, each document which shall be analyzed, is first submitted to a so-called filtering module” pp [0160]), the structural constraints define the permissible parent-child relationship between the various node types and wherein a plurality of applications access the software components (see paragraph [0052], [0258], [0262]; e.g., parent-child relationship involving nodes).

The missing of Meik is the limitation, “wherein each of the design tools controls at least one of the software components”

Do explicitly recites the limitation, “wherein each of the design tools controls at least one of the software components” (see Abstract; see paragraph [0074], [0108],

Art Unit: 2165

[0145], [0148]; e.g., Axiomatic design tools that interact with software components and manipulate objects into a desired shape or format. They allow a user to populate an axiomatic design equation to determine coupling between elements of a previously developed software system)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the controlling and manipulation of software components by software design tools as taught by Do with classification based interactive system for information retrieval as taught by Meik because it would be beneficial to have a software system and method that would produce and reuse software code in an error-free, efficient, and expedient manner, decreasing cost of development, maintenance cost, and extensive debugging.

As for Claim 3, Meik et al teaches the classification structure is hierarchical (see Abstract; see paragraph [0064-0065], [0095]; e.g., hierarchical structure).

As for Claim 4, Meik et al teaches the software components are associated with classification nodes (see paragraph [0052], [0258], [0262]; e.g., parent-child relationship involving nodes).

As for Claim 6, Meik et al clearly teaches a graphical user interface is employed by a user to classify software components (see paragraph [0186-0190], [0214]; e.g., GUI).

As for Claim 16, Meik et al teaches a common classification methodology comprising generating one or more taxonomies comprising defining node types, structure type classes and structural constraints, wherein the parent-child relationship between the various node types is specified by the structural constraints; (see paragraph [0008-0014], [0037], [0122-0129]; e.g., search engine component that performs all of the duties of classification and categorization), maintaining the taxonomies to facilitate interaction with taxonomy artifacts by a plurality of unrelated software design tools (see paragraph [0155-0160], [0167-0185]; e.g., filtering module)).

The missing of Meik is the limitation, “wherein each of the design tools controls at least one of the taxonomy artifacts”

Do explicitly recites the limitation, “wherein each of the design tools controls at least one of the taxonomy artifacts” (see Abstract; see paragraph [0074], [0108], [0145], [0148]; e.g. axiomatic design tools)

Claim 20 differs from Claim 6 in that claim 20 is a method claim whereas claim 6 is a system claim. Thus, claim 20 is analyzed as previously discussed with respect to claim 6 above.

As for Claim 26, Meik et al clearly teaches the taxonomy is represented in XML (see paragraph [0303]; e.g., XML).

Claims 7, 9-12, 14-15, 21, 23-25, 27, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meik et al (USPG Pub No. 20050108200A1; Meik hereinafter) in view of Gargi et al (USPG-Pub No. 20050027712A1; Gargi hereinafter) further in view of Do et al (USPG-Pub No. 20020170042A1; Do hereinafter).

As for Claim 11, Meik explicitly recites “a means for maintaining the common classification scheme to provide a foundation for a cohesive user experience and wherein the plurality of unrelated software design tools access the components. (see Fig. 1 & 4; (see paragraph [0155-0160], [0167-0181], [0186-0190]; e.g., whereas the cohesion of the plurality of modules that perform the tasks of classification and categorization of information at the users request, as well as the utilization of customized user interfaces allowing for the ease of use in order to locate a desired result while interacting with numerous software applications, is equivalent to Applicant’s teachings of providing a cohesive user experience through the inclusion of unrelated software design tools).

The missing of Meik is the limitation of “a software tool interaction system comprising a means for generating a common classification scheme amongst a plurality of unrelated software tools stored in a computer readable medium, wherein the classification...is based on a structure type and comprises structure type class, node types and structural constraints, the structural constraints.”

Gargi et al explicitly recites, “a software tool interaction system comprising a means for generating a common classification scheme amongst a plurality of unrelated



Art Unit: 2165

software tools stored in a computer readable medium, wherein the classification is based on a structure type and comprises structure type class, node types and structural constraints, the structural constraints (see paragraph [0012], [0072-0076]; whereas Gargi et al teaching of clusters, meta data and hierarchy is equivalent to Applicant's teaching of hierarchy, class and constraints) define the permissible parent-child relationship between the various node types"; (see Fig. 15; e.g., object types; (see paragraph [0096][0105][0113]))

The missing of both Meik and Gargi is the limitation, "the components controlled by the plurality of design tools"

Do explicitly recites the limitation, "the components controlled by the plurality of design tools" (see Abstract; see paragraph [0074], [0108], [0145], [0148]; e.g., Axiomatic design tools that interact with software components and manipulate objects into a desired shape or format. They allow a user to populate an axiomatic design equation to determine coupling between elements of a previously developed software system)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the controlling and manipulation of software components by software design tools as taught by Do with classification based interactive system for information retrieval as taught by Meik with the organizing a collection of objects as taught by Gargi et al in order to improve the precision of searching, thereby minimizing browse time and false hits without suffering a

Art Unit: 2165

corresponding reduction in the relevant document recall rate (see Meik; paragraph [0079]).

As for Claim 28, Meik explicitly recites “exposing the common structure amongst a plurality of unrelated software design tools and provide a foundation for a cohesive user experience and wherein the plurality of tools access the components.” (see Fig. 1 & 4; (see paragraph [0155-0160], [0167-0181], [0186-0190]; e.g., whereas the cohesion of the plurality of modules that perform the tasks of classification and categorization of information at the users request, as well as the utilization of customized user interfaces allowing for the ease of use in order to locate a desired result while interacting with numerous software applications, is equivalent to Applicant’s teachings of providing a cohesive user experience through the inclusion of unrelated software design tools).

The missing of Meik is the limitation, “a common enterprise classification scheme methodology comprising instantiating a common structure based on a structure type, the common structure comprising structure type class, node types and structural constraints.”

Gargi et al explicitly recites, “a common enterprise classification scheme methodology comprising instantiating a common structure based on a structure type, the common structure comprising structure type class, node types and structural constraints (see paragraph [0012], [0072-0076]; whereas Gargi et al teaching of clusters, meta data and hierarchy is equivalent to Applicant’s teaching of hierarchy, class and constraints), the structural constraints define the permissible parent-child

Art Unit: 2165

relationship between the various node types; (see Fig. 15; e.g., object types; (see paragraph [0096][0105][0113])).

The missing of both Meik and Gargi is the limitation, “to classify the components they control,”

Do explicitly recites the limitation, “to classify the components they control.” (see Abstract; see paragraph [0074], [0108], [0145], [0148]; e.g., Axiomatic design tools that interact with software components and manipulate objects into a desired shape or format. They allow a user to populate an axiomatic design equation to determine coupling between elements of a previously developed software system)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the controlling and manipulation of software components by software design tools as taught by Do with classification based interactive system for information retrieval as taught by Meik with the organizing a collection of objects as taught by Gargi et al in order to improve the precision of searching, thereby minimizing browse time and false hits without suffering a corresponding reduction in the relevant document recall rate (see Meik; paragraph [0079]).

As for Claim 7, Gargi et al clearly teaches a user drags and drops components onto a classification node (see Fig. 2 (164) e.g., layout engine; see paragraph [0085]).

As for Claim 9, Gargi et al clearly teaches a notification component that notifies consumers of the common structure of proposed changes to the structure to give them an opportunity to veto the change (see Fig. 16 (62-78); (see paragraph [0107][0108][0112] and [0114]; e.g., notification service)).

As for Claim 10, Gargi et al clearly teaches a notification component that alerts consumers of the common structure of a change (see Fig. 16 (62-78); (see paragraph [0107][0108][0112] and [0114])).

As for Claim 12, Gargi explicitly recites, “drag and drop artifacts onto classification nodes” (see Fig. 2 (164) e.g., layout engine; see paragraph [0085]). The missing of Gargi is “a user generating a classification scheme employing a graphical user interface”. Meik explicitly recites of a user generating a classification scheme employing a graphical user interface (see paragraph [0122-0129]).

Claims 14 and 15 differ from Claims 9 and 10 in that claims 14 and 15 are software tool interaction system whereas claims 9 and 10 are classification system claims. Thus, claims 14 and 15 are analyzed as previously discussed with respect to claims 9 and 10 above.

Claim 21 differs from Claim 7 in that claim 21 is a method claim whereas claim 7 is a system claim. Thus, claim 21 is analyzed as previously discussed with respect to claim 7 above.

As for Claim 23, Gargi et al teaches maintaining the taxonomies (e.g., clusters or groups; see paragraph [0049]) includes notifying a user or owner of classifiable artifacts of changes to the taxonomy (see Fig. 16 (64); see paragraph [0107]).

As for Claim 24, Gargi et al teaches a before change event is raised prior to a change to provide owners with an opportunity to veto proposed changes (Fig. 16 (62-78); (see paragraph [0107][0108][0112] and [0114])).

As for Claim 25, Gargi et al teaches an after change event is raised to all owners to enable them to reflect a change that has been completed (Fig. 16 (62-78); (see paragraph [0107][0108][0112] and [0114])).

As for Claim 27, Gargi et al teaches a computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 16 (see paragraph [0041]).

Claim 30 differs from claims 6 and 20 in that claim 30 is a common enterprise classification scheme method whereas claim 6 is a system and claim 20 is a common

Art Unit: 2165

classification method claim. Thus, claim 30 is analyzed as previously discussed with respect to claims 6 and 20 above.

As for Claim 31, Gargi et al clearly teaches requesting consent from consumers of the common structure to proposed changes to the structure (see Fig. 16 (62-78); (see paragraph [0107][0108][0112] and [0114])).

As for Claim 32, Gargi et al clearly teaches a computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 28 (see paragraph [0041]).

Claims 5, 8, 13, 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meik et al (USPG Pub No. 20050108200A1; Meik hereinafter) in view of Gargi et al (USPG-Pub No. 20050027712A1) further in view of Omoigui et al (USPG-Pub No. 20030126136A1).

As for Claim 5, Meik et al teaches of the use of a hierarchical structure consisting of object types, a graphical user interface, a plurality of software components as well as a plurality of unrelated software design tools in interacting for the purpose of classification and categorization of information.

Gargi et al teaches of organizing a collection of objects through classification nodes, and a segmentation engine (e.g., taxonomy engine). Both Gargi et al and Meik

Art Unit: 2165

et al fail to explicitly teach of a globally unique identifier (GUID) being incorporated into his art. Omoigui et al teaches of a globally unique identifier (see paragraph [0982]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined a globally unique identifier as taught by Omoigui et al with the organizing a collection of objects as taught by Gargi et al because it is a preferable file naming method, as made hackneyed in the state of the art. (Omoigui et al (USPG-Pub No. 20030126136A1); see paragraph [0982]).

As for Claim 8, Meik et al teaches of a plurality of software components as well as a plurality of unrelated software design tools in interacting for the purpose of classification and categorization of information. Gargi et al teaches of the classification component utilizing statistical analysis related to artificial intelligence to couple software components to the common structure (see Fig. 17 (120); e.g., Business Process Cockpit; (see paragraph [0043][0110][0112] and [0114])). Both Gargi et al and Meik et al fails to explicitly recite the limitation of heuristics. Omoigui et al teaches heuristics to couple software components to a common structure (see paragraph [0622][1048]).

Claim 13 differs from Claim 8 in that claim 13 is a software tool interaction system whereas claim 8 is a classification system claim. Thus, claim 13 is analyzed as previously discussed with respect to claim 8 above.

As for Claim 19, Meik et al teaches of a plurality of software components as well as a plurality of unrelated software design tools in interacting for the purpose of classification and categorization of information. Gargi et al teaches of node (e.g., classification nodes; see paragraph [0106][0107]) in a taxonomy (e.g., object cluster or group; see paragraph [0049]). Both Gargi et al and Meik et al fail to explicitly teach of a globally unique identifier (GUID) being incorporated into his art. Omoigui et al teaches of a globally unique node identifier (see paragraph [0982]).

Claim 22 differs from Claims 8 and 13 in that claim 22 is a method claims whereas claim 8 is a distributed classification and claim 13 is a software tool interaction system claim. Thus, claim 22 is analyzed as previously discussed with respect to claims 8 and 13 above.

### ***Response to Arguments***

Applicant's arguments with respect to Claims 1, 3-16, 19-28 & 30-32 have been fully considered but are considered moot in view of the new grounds of rejection.



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAHEEM HOFFLER whose telephone number is (571)270-1036. The examiner can normally be reached on 7:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2165

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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